STUDY SPONSOR: CBI
STUDY TYPE:
TEST ITEM:
STUDY NUMBER:

INTRODUCTION

The study was performed to assess the irritancy potential of the test item following single, 3-Minute, 1 and 4-Hour, semi-occluded applications to the intact rabbit skin (General Study Plan 540-17).

This study was designed to be compatible with the procedures indicated by the following internationally accepted guidelines and recommendations:

- OECD Guidelines for the Testing of Chemicals No. 404 "Acute Dermal Irritation/Corrosion" (adopted 24 April 2002)
- Method B4 Acute Toxicity (Skin Irritation) of Commission Regulation (EC) No. 440/2008

Initial considerations

In the absence of data suggesting that the test item was unlikely to produce severe irritation/corrosion, an *ex vivo* pre-screen test, the Transcutaneous Electrical Resistance Assay, was performed. The results of the pre-screen test indicated that the test item was considered not to be corrosive to the skin and the *in vivo* test was performed. The results of the Transcutaneous Electrical Resistance Assay are given in the Appendix.

Experimental Starting Date: 04 June 2014
Experimental Completion Date: 11 July 2014

Test item characterization data are the responsibility of the Sponsor.

All raw data will be retained in CBI

METHOD

3-Minute and 1-Hour semi-occluded applications (0.5 mL) of the test item were administered to the intact skin of one rabbit. Skin reactions were recorded 1, 24, 48 and 72 hours after administration.

A single 4-Hour, semi-occluded application (0.5 mL) of the test item was administered to the intact skin of two rabbits. Skin reactions were recorded 1, 24, 48 and 72 hours after administration.

RESULTS

Individual skin reactions following the 3-Minute and 1-Hour exposure periods are given in Table 1 and individual skin reactions following a 4-Hour exposure period are given in Table 2.

3-Minute and 1-Hour semi-occluded applications of the test item to the intact skin of one rabbit produced no evidence of skin irritation.

A single 4-Hour, semi occluded application of the test item to the intact skin of two rabbits produced no evidence of skin irritation.

CONCLUSION

The test item produced a primary irritation index of 0.0 and was classified as non-irritant to rabbit skin according to the Draize classification scheme. No corrosive effects were noted.

This study was conducted in a facility operating to Good Laboratory Practice within the UK national GLP monitoring programme, but the study report has not been audited by the QA Unit. No formal claim of GLP compliance is made for this study. This report is an accurate record of the study and its outcome.

A. Pools Date: 6/10/14

A Pooles
Study Director

TABLES

Table 1 Individual Skin Reactions Following 3-Minute and 1-Hour Exposures

Skin Reaction	Observation Time (following patch removal)	Individual Scores	
		Rabbit Number and Sex 74394 Male	
		3-Minute Exposure	1-Hour Exposure
Erythema/Eschar Formation	Immediately	0	0
	1 Hour	0	0
	24 Hours	0	0
	48 Hours	0	0
	72 Hours	0	0
Edema Formation	Immediately	0	0
	1 Hour	0	0
	24 Hours	0	0
	48 Hours	0	0
	72 Hours	0	0

Table 2 Individual Skin Reactions Following 4-Hour Exposure

Skin Reaction	Observation Time (following patch removal)	Individual Scores		Total
		Rabbit Number and Sex		
		74394 Male	74488 Female	
Erythema/Eschar Formation	Immediately	0	0	(0)
	1 Hour	0	0	(0)
	24 Hours	0	0	0
	48 Hours	0	0	(0)
	72 Hours	0	0	0
Edema Formation	Immediately	0	0	(0)
	1 Hour	0	0	(0)
	24 Hours	0	0	0
	48 Hours	0	0	(0)
	72 Hours	0	0	0
Sum of 24 and 72-Hour Readings (S)	:	0		
Primary Irritation Index (S/4)	:	0/6 = 0.0		
Classification	:	NON-IRRITANT		

Primary Irritation Index	Classification
0	Non-irritant
> 0 – 2	Mild irritant
>2 – 5	Moderate irritant
>5 – 8	Severe irritant

( ) = Total values not used for calculation of primary irritation index

APPENDIX

TRANSCUTANEOUS ELECTRICAL RESISTANCE ASSAY

Introduction

The skin corrosivity potential of the test item was assessed using the Transcutaneous Electrical Resistance Assay. This involved the application of the test item to the epidermal surface of skin discs, obtained from a humanely killed young Wistar (RccHan™:WIST) strain rat.

Methods

The prepared pelt from the rat was used for skin disc preparation. The integrity of the pelt was confirmed using a Quality Control test. Only acceptable pelts were used to supply skin discs for use in the assay.

The test item was applied to the epidermal surface of three skin discs for a contact period of 24 hours. At the end of the contact period the test item was removed using a jet of warm tap water. Corrosive substances produce an irreversible loss of normal stratum corneum integrity and function, this is measured as a reduction in the inherent transcutaneous electrical resistance. Test items that give a mean electrical resistance of 5 kΩ or less are considered likely to be corrosive *in vivo*. The transcutaneous electrical resistance was measured using a low voltage alternating current electronic databridge.

Results

The results are summarized as follows:

Test Item Contact Period	Mean Electrical Resistance (Standard Deviation)
24 Hours	14.2 kΩ (± 1.3)

Conclusion

Following assessment of the data the test item was considered unlikely to have the potential to cause corrosion *in vivo*.